Regional Outlook

FEDERAL DEPOSIT INSURANCE CORPORATION — FIRST QUARTER 2000

FDIC
DALLAS
REGION

DIVISION OF
INSURANCE

ALAN C. BUSH,
REGIONAL MANAGER

ADRIAN R. SANCHEZ,
REGIONAL ECONOMIST

JEFFREY A. AYRES,
SENIOR FINANCIAL
ANALYST

STEPHEN L. KISER,
ECONOMIC ANALYST

In Focus This Quarter

◆ ***Recent Trends Raise Concerns about the Future of Business Credit Quality*—Commercial and industrial (C&I) lending is one of the largest and fastest-growing lending lines at insured institutions. Recent growth in C&I lending can be attributed to a strong U.S. economy, increased industrial merger activity, and a willingness of lenders to extend credit. While C&I credit quality remains relatively strong, signs of deterioration have recently begun appearing in C&I portfolios and in corporate bond defaults. These signs of weakness in commercial credit quality raise concerns because they are appearing during a period of economic strength. Business credit quality could deteriorate further in the event of an economic slowdown, higher interest rates, or a loosening of underwriting practices.** *See page 3.*

By Arlinda Sothoron, Alan Deaton

◆ ***Local Industries in the Global Economy*—The contribution of international trade to overall U.S. economic activity has been increasing for a number of years. Although the United States trades with many nations, most activity is concentrated in a few markets—Canada, Japan, and Mexico. Across a collection of industries, there is, however, considerable variation in both the level of exposure to export markets and the intensity of import competition. A number of industries are highly exposed to international markets, suggesting that economic conditions abroad are particularly important in any assessment of future revenue growth or profitability.** *See page 11.*

By Paul C. Bishop

Regional Perspectives

◆ ***Banks and Thrifts in the Dallas Region Continue to Report Strong Earnings and Solid Credit Quality*—However, loan loss reserves relative to loans and noncurrent loans are declining and are the lowest among the eight FDIC Regions.**

◆ ***Agricultural producers' operating profitability is suffering as commodity prices continue a three-year decline;* record government payments have maintained net farm income.**

◆ ***While agricultural banks reported strong financial ratios,* a substantial increase in carryover debt prompts concerns about deteriorating credit quality at these banks.**

◆ ***NAFTA expanded the flow of goods and capital among the United States, Canada, and Mexico;* however, its effects on job growth in the United States and the Region were only marginally positive.**

By the Dallas Region Staff

The ***Regional Outlook*** is published quarterly by the Division of Insurance of the Federal Deposit Insurance Corporation as an information source on banking and economic issues for insured financial institutions and financial institution regulators. It is produced for the following eight geographic regions:

Atlanta Region (AL, FL, GA, NC, SC, VA, WV)
Boston Region (CT, MA, ME, NH, RI, VT)
Chicago Region (IL, IN, MI, OH, WI)
Dallas Region (CO, NM, OK, TX)
Kansas City Region (IA, KS, MN, MO, ND, NE, SD)
Memphis Region (AR, KY, LA, MS, TN)
New York Region (DC, DE, MD, NJ, NY, PA, PR, VI)
San Francisco Region (AK, AS, AZ, CA, FM, GU, HI, ID, MT, NV, OR, UT, WA, WY)

Single copy subscriptions of the ***Regional Outlook*** can be obtained by sending the subscription form found on the back cover to the FDIC Public Information Center. Contact the Public Information Center for current pricing on bulk orders.

The ***Regional Outlook*** is available on-line by visiting the FDIC's website at www.fdic.gov. For more information or to provide comments or suggestions about the Dallas Region's ***Regional Outlook,*** please call Alan Bush at (972) 761-2072 or send an e-mail to *abush@fdic.gov.*

Recent Trends Raise Concerns about the Future of Business Credit Quality

- **C&I loan portfolios have been growing rapidly during this economic expansion.**
- **Indicators of weakening corporate credit quality have begun to appear, including higher C&I loan losses and rising corporate bond defaults.**
- **The future of business credit quality will depend on the economy and on underwriting practices.**

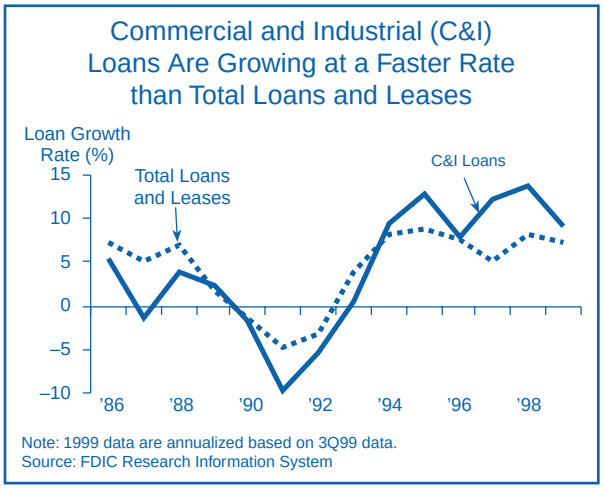
Commercial and industrial (C&I) lending is one of the largest and fastest-growing segments of lending at insured institutions. As of the third quarter of 1999, C&I loans comprised 24 percent of total loans and leases held by FDIC-insured institutions, up from 21 percent at the end of 1995. C&I loan portfolios have grown primarily because of strong loan demand driven by a long economic expansion during which the indebtedness on corporate balance sheets has expanded rapidly. Even as the economic expansion continues, C&I loan charge-offs have begun to trend upward, albeit from historically low levels. By some measures, banks and the financial markets appear to be assuming increased levels of risk that could lead to greater C&I loan losses when the economy eventually weakens.

High rates of growth in commercial lending and weakening indicators of C&I credit quality raise concerns about the future of credit quality at insured institutions. This article examines the factors that have contributed to high C&I loan growth rates and discusses the drivers that will determine the direction of C&I credit quality in the future. While loan performance at insured institutions is relatively good at the present time, signs of deterioration and stress have begun to appear despite the continued strength of the domestic economy. The future of C&I credit quality will ultimately be determined by trends in underwriting and corporate debt levels, along with the performance of the U.S. economy.

C&I Loan Growth Has Accelerated

C&I loans held by FDIC-insured banks and thrifts grew by almost 9 percent during the 12 months ending in September 1999, down somewhat from a 13.4 percent rate of growth in 1998 (see Chart 1). By contrast, total

CHART 1



loans and leases at insured institutions grew by only 7 percent in the 12 months ending in September 1999. C&I loans accounted for approximately 29 percent of all net new loans booked during the 12 months ending in September 1999, while unfunded C&I loan commitments grew by approximately 17 percent to $1.6 trillion. Syndicated lending played a major role in C&I loan growth during the 1990s. As intense competition and a narrowing of financial institutions' net interest margins have encouraged lenders to seek additional sources of revenue, larger institutions have become increasingly active as loan syndicators and as purchasers of syndicated credits. Syndicated loan volume reached its peak in 1997, when originations totaled some $1.1 trillion (see Chart 2, next page).[1] After falling off in 1998, originations of syndicated loans rose by 17 percent in 1999 to just over $1.0 trillion. Leveraged loans, in which the borrower's debt-to-equity ratio is significantly higher than the industry average, served as a catalyst for syndicated lending growth in 1999, accounting for 32 percent of total syndicated loan originations. Leveraged lending is very attractive to lending institutions because of the generous fee income associated with leveraged originations. Leveraged loan originations grew to $320 billion in 1999, partly because of the continued rapid pace of corporate mergers in 1999.[2]

[1] *LPC Gold Sheets,* Vol. XIV, No. 1. Loan Pricing Corporation. January 10, 2000.

[2] According to Houlihan Lokey's *Mergerstat,* total M&A activity set a new record of $1.4 trillion in merger deal value in 1999.

Most of the C&I loan growth among insured institutions since 1997 has been concentrated in loans to domestic borrowers. C&I loans held in foreign offices declined following the Asian economic crisis and the Russian government bond default in 1997 and 1998, respectively, while domestic C&I lending was growing at double-digit rates. During the 12 months ending in September 1999, C&I loans held in domestic offices grew 12.2 percent while C&I loans held in foreign offices declined by almost 6 percent.

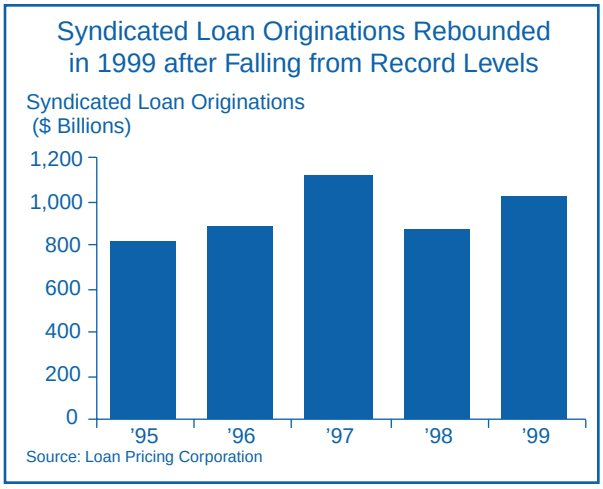
Is This Rapid Loan Growth a Cause for Concern?

The effect of rapid loan growth on subsequent credit quality has been the subject of a number of articles. A recent study by the ***Federal Reserve Bank of Kansas City*** found that high rates of loan growth in the early 1980s and early 1990s appeared to be positively correlated with future higher loss rates.[3] The study also noted, however, that relatively high loan growth rates in the late 1980s did not result in sharply higher loss rates. Another study by the ***Federal Deposit Insurance Corporation*** found that banks that failed during the banking crisis of the 1980s were generally more likely to have grown their loan portfolios aggressively than banks that did not fail.[4] But it remains to be seen whether the high C&I loan growth rates of today will necessarily contribute to higher losses for insured institutions in the future. The future course of industry loan losses depends on many factors, including the condition of the economy, the interest rate environment, and underwriting standards used in originating C&I credits.

The Condition of the Economy Is an Important Driver of C&I Loan Growth

Recent economic conditions have been particularly conducive to rapid growth in domestic C&I lending. Business investment has expanded at double-digit annual rates as firms have invested in new technologies to raise productivity and keep costs down. These productivity gains have been instrumental in allowing the economy to grow at a relatively rapid pace with low inflation. Strong growth in real wages has helped boost the consumer confidence index to an all-time high of 144 in January 2000. Robust consumer demand for goods and services has kept business profits growing, further spurring business borrowing to finance inventories, new construction, and fixed assets such as computer networks. Amid all of these favorable trends, C&I loan charge-off rates have remained at record lows of less than 0.5 percent since 1994. Recently, however, despite a continuation of generally favorable conditions in the economy and the financial markets, signs of credit quality deterioration have begun to appear in C&I loan portfolios.

Chart 2



Evidence from Financial Institutions Points to a Weakening in Business Credit Quality

Despite strong business conditions and generally good asset quality, signs of deterioration in C&I credit quality have begun to appear in bank portfolios. While problem C&I loan levels remain low by historical standards, net C&I loan charge-offs during the 12 months ending in September 1999 were 63 percent higher than during the previous 12-month period. The net C&I loan charge-off rate rose in the 12 months ending in September 1999 to 0.5 percent, up from 0.3 percent one year earlier. Similarly, noncurrent C&I loans as of September 1999 rose to $11.2 billion, or 1.2 percent of total C&I loans.[5] In dollar terms, this level of noncurrent loans is 30 percent higher than one year earlier.

[3] William R. Keeton. "Does Faster Loan Growth Lead to Higher Loan Losses?" *Economic Review.* Federal Reserve Bank of Kansas City. Second quarter 1999.

[4] Federal Deposit Insurance Corporation, Division of Research and Statistics. *History of the Eighties: Lessons for the Future. Vol. 1, An Examination of the Banking Crises of the 1980s and Early 1990s*. 1997. http://www.fdic.gov/bank/historical/history/contents.html.

[5] Noncurrent C&I loans include C&I loans past-due over 90 days and all C&I loans in nonaccrual status.

Despite these increases in C&I charge-offs and noncurrent C&I loans, the current industry ratios for these measures remain well below the 1.9 percent and 4.5 percent ratios reported during the recession in 1991 for net C&I charge-offs and noncurrent C&I loans, respectively.

Interagency Loan Review Reveals Increases in Problem Credits from Previously Low Levels

The results of the ***1999 Shared National Credit (SNC)*** review provide another indication of slipping credit quality at large commercial banks.[6] According to the ***Federal Reserve Board of Governors,*** adversely classified syndicated loans rose to $37.4 billion in the 1999 review, a level approximately 70 percent higher than that reported in 1998. This figure represents 2 percent of the $1.8 trillion in drawn and undrawn loan commitments reviewed in 1999. By contrast, adversely classified assets identified in the 1998 SNC review totaled only $22 billion, or 1.3 percent of loans reviewed in 1998.[7]

While the level of adversely classified syndicated loans remains low, 14 percent of the loans adversely classified during the 1999 review were loans made to new borrowers since the 1998 SNC review. In reference to this finding, ***Office of the Comptroller of the Currency (OCC)*** First Senior Deputy Comptroller and Chief Counsel Julie Williams has noted that "Banks are booking new loans that are weak at their inception."[8] The high rate of adversely classified new loans could be attributable to the continued effects of loan originations made toward the end of a period of loosened underwriting standards in 1997 and early 1998. Alternatively, it could indicate a higher-risk credit mix in current C&I loan portfolios.

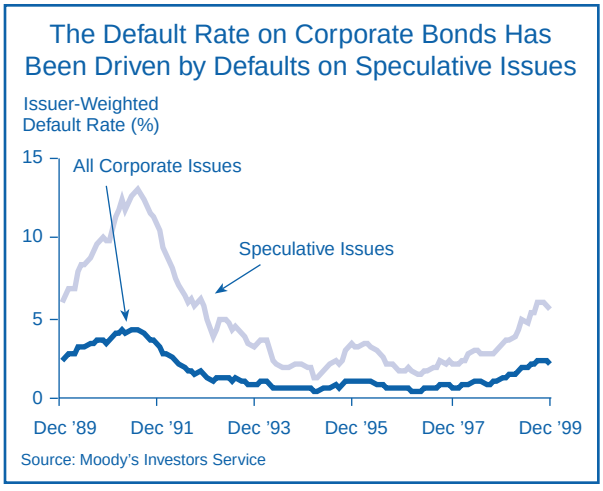
Signs of corporate stress that may weaken credit quality at insured institutions are also reflected in recent ***Banc of America Securities*** analysis of publicly available bank loan amendments.[9] This study shows a significant increase in the number of loan amendments generated because of covenant relief requests, from 22 percent of all loan amendments during the last six months of 1998 to 45 percent during the first ten months of 1999.

Corporate Bond Defaults Soared in 1999

Trends in corporate bond defaults also indicate increasing levels of stress in the corporate sector. During 1999, 147 issuers defaulted on $44.6 billion in long-term debt. Default rates as a percentage of volumes outstanding (or dollar default rates) have trended upward each year since 1996, reaching 2.2 percent for all corporate issues at year-end 1999. Much of the increase can be attributed to a rising dollar default rate for speculative-grade issues, which peaked in November 1999 at 8.2 percent. Measured as a percentage of all issuers, the default rate for speculative-grade issues rose to a post-1991 high of 6 percent in September 1999 (see Chart 3). According to ***Moody's,*** year-end 1999 default rates improved marginally but are expected to remain high through mid-2000.[10] In addition, domestic speculative-grade issuers reported twice as many issuer downgrades as upgrades during the fourth quarter of 1999, although the dollar volume of upgrades exceeded the dollar volume of downgrades by 55 percent.[11]

[6] The annual interagency process reviews commercial loans over $20 million that are shared by three or more participants.
[7] Federal Reserve Board Press Release. November 10, 1999.
[8] "OCC's Williams Warns of Credit Risk in the Banking System; Calls for Bankers to Scrutinize Loan Portfolios More Closely." OCC Press Release. October 5, 1999.
[9] "Leveraged Loans: The Plot Thickens." Banc of America Securities Syndicated Finance Research. November 15, 1999. This loan amendment analysis was completed using only publicly available information from Loan Pricing Corporation and Banc of America Securities LLC.
[10] "Corporate Bond Default Rates Highest Since 1991." Moody's Investors Service. October 13, 1999.
[11] "Moody's Default Rate Pendulum." Moody's October 1999 Commentary. Moody's Investors Service. October 18, 1999.

CHART 3



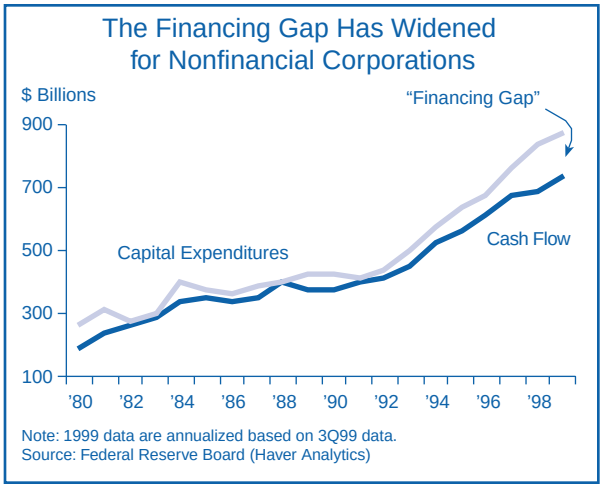
Why Are C&I Loan Losses Increasing Amid Strong Economic Growth?

Several factors have contributed to the current signs of deterioration of C&I credit quality in an environment of favorable business conditions. These factors include global competition and deflationary pressures, an increase in corporate debt levels, loosened underwriting standards, and a greater appetite for risk.

Global competition and deflationary pressures have squeezed revenues. An era of low inflation and intense global price competition has contributed to low or negative revenue growth in a number of domestic industry sectors, particularly commodities and manufacturing.[12] The result has been an increase in loan losses and corporate bond defaults in these sectors. ***Moody's*** noted that the industrial sector, weakened by low commodity prices, accounted for 64 percent of all defaults in 1999, with the oil and gas, steel, and shipping industries being especially hard-hit.[13] For example, ***Standard & Poor's (S&P)*** reports that third-quarter 1999 earnings for the iron and steel sector declined 80 percent from one year earlier after five consecutive quarters of negative year-over-year earnings growth. Initially, commodity price declines and the international economic turmoil in 1997 and 1998 resulted in slowed foreign C&I lending and increased net losses of C&I loans held in foreign offices. These losses accounted for the majority of net C&I loan losses in 1997 and 1998. However, this adverse trend reversed itself in 1999, when C&I loans held in domestic offices accounted for the majority of losses.

Corporations are increasingly reliant on debt markets. Increasing levels of debt on corporate balance sheets have helped to foster C&I loan growth. The growth in corporate debt is partially a result of actions taken by firms to improve operating efficiency, including increasing merger and acquisition (M&A) activity and rising spending on fixed investments. Capital expenditures on fixed investments by businesses have increased at a steady rate since the 1990–91 recession, as evidenced by Chart 4. Cash flow has also been increasing, but at a slower rate, resulting in a growing "financing gap" that reached an annualized level of

CHART 4



$142 billion in the third quarter of 1999. Where cash flow has not been available to finance investment, firms have turned primarily to debt financing as opposed to equity financing. Net new corporate equity issues by nonfarm nonfinancial corporations have been negative in each year since 1993, while net new corporate bond issuance has increased from $75 billion in 1993 to $219 billion in 1998.

Loosened underwriting standards in 1997 and early 1998 are contributing to current losses. Signs of stress in C&I loan portfolios can be partially attributed to loosened underwriting standards in 1997 and early 1998. During 1997 and early 1998, loan underwriting standards loosened, accompanied by reduced spreads and pricing. In May 1998, the ***Federal Reserve Board Senior Loan Officer Opinion Survey on Bank Lending Practices*** reported that domestic banks were "generally eager to make loans to businesses" and that during early 1998 "a large percentage cut their spreads on such loans." ***Moody's*** describes the second half of the 1990s as a "mini credit cycle." The cycle began in 1995, when the strong economy, accompanied by falling interest rates and low loan losses and default rates, encouraged investor demand for high-yield bonds and loans.[14]

A record number of first-time speculative-grade deals were also brought to market during 1997 and early 1998. The increase in the volume of issuance was itself enough to push the default rate lower, which in turn may have fueled investor demand for additional high-risk bonds. However, the Asian crisis during 1997 and the Russian debt default during the second half of 1998

[12] See also Richard A. Brown and Alan Deaton. "Falling Prices in Commodities and Manufacturing Pose Continuing Risks to Credit Quality." *Regional Outlook,* third quarter 1999. http://www.fdic.gov/bank/analytical/regional/ro19993q/na/t3q1999.pdf.

[13] "Historical Default Rates of Corporate Bond Issuers, 1920–1999." Moody's Investors Service, January 2000.

[14] "Default Rate Pendulum." October 18, 1999.

caused new issuance of speculative-grade bonds to slow significantly while defaults rose sharply, to a rate of 6 percent by issuer in September 1999. While speculative-grade bond issuance declined, banks stepped in to fill the void by raising originations of highly leveraged loans between second-quarter 1998 and fourth-quarter 1999.[15]

Financial markets have evidenced greater risk appetite. While the ratio of speculative-grade bond issues to total corporate bond issues has remained fairly stable at approximately 40 percent during the past decade, the composition of borrowings has shifted substantially. ***Moody's*** reports a shift in the distribution of bond issue ratings within the speculative-grade category toward the lower end of the ratings scale (see Chart 5).[16] Evidence of this shift is demonstrated by the fact that bonds rated B3 or lower currently comprise approximately 35 percent of all speculative-grade issues, a record high and up from 24 percent in 1995.[17] Furthermore, almost 50 percent of the issuers that defaulted during the year ending September 1999 were rated for three years or less.[18] This change in the composition of ratings has contributed to the current increase in speculative-grade defaults and could affect the future volatility and liquidity of the market. The current high volume of corporate bond defaults reflects the looser standards in 1997 and 1998 for corporate debt issued by low-rated first-time issuers, who accounted for 40 percent of rated bond defaults in 1999.[19] This relationship is analogous to the current increase in net C&I charge-offs partially attributable to weakened underwriting standards in 1997 and early 1998.

The Increase in Leveraged Lending Could Result in a Riskier Mix in C&I Loan Portfolios

Leveraged lending comprises an important part of the syndicated lending market and generates considerable fee income for financial institutions. Leveraged loans have grown from 12 percent of total syndicated loan originations in 1995 to 32 percent in 1999 (see Chart 6, next page). Leveraged syndicated loan originations grew 19 percent to $320 billion in 1999, as investors were seeking higher risk-adjusted returns and lenders were seeking higher fees. ***Paine Webber*** analysts estimate that leveraged lending accounts for over 80 percent of syndicated loan fees and profits earned by loan underwriters.[20] Highly leveraged lending increased to a new record of $190 billion in 1999.[21] This growth in loan originations reflects the current high corporate demand for loans, and by definition these loans are being made to borrowers with higher-than-normal levels of financial leverage and risk. In return for their higher risk profile, leveraged borrowers must compensate financial institutions through higher pricing and higher fees.

[15] *LPC Gold Sheets.* January 10, 2000.
[16] Moody's January 2000 Commentary. January 18, 2000.
[17] "Refunding Risk for Speculative Grade Borrowers." Moody's Special Comment. Moody's Investors Service. December 15, 1999.
[18] "Default Rate Pendulum." October 18, 1999.
[19] Moody's January 2000 Commentary. January 18, 2000.
[20] "The Biggest Secret of Wall Street." Paine Webber Equity Research. May 14, 1999.
[21] Loan Pricing Corporation defines highly leveraged loans as those for which pricing exceeds 250 basis points over LIBOR and generally involves sub-investment-grade credits.

CHART 5

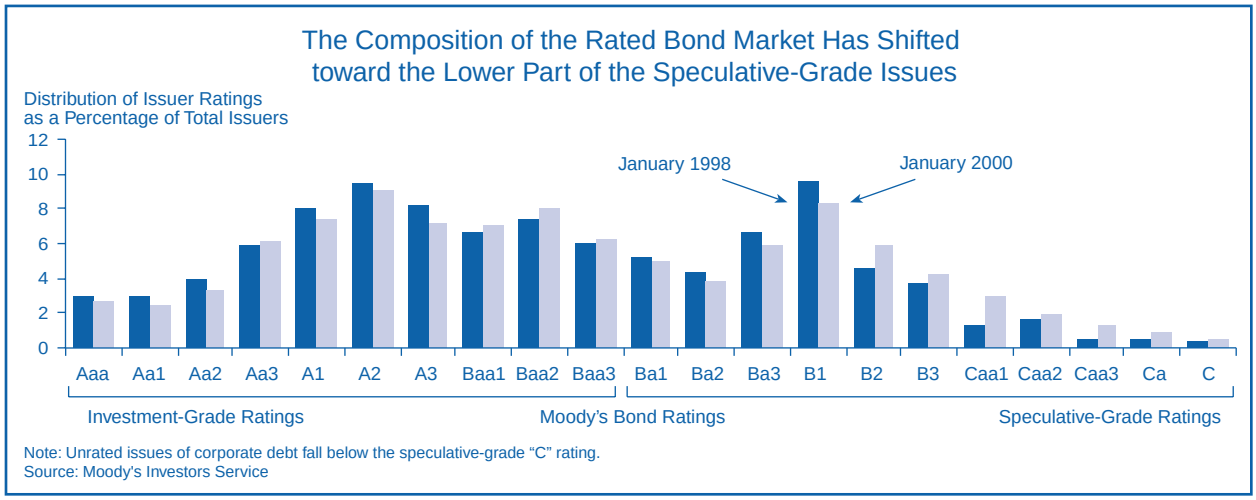
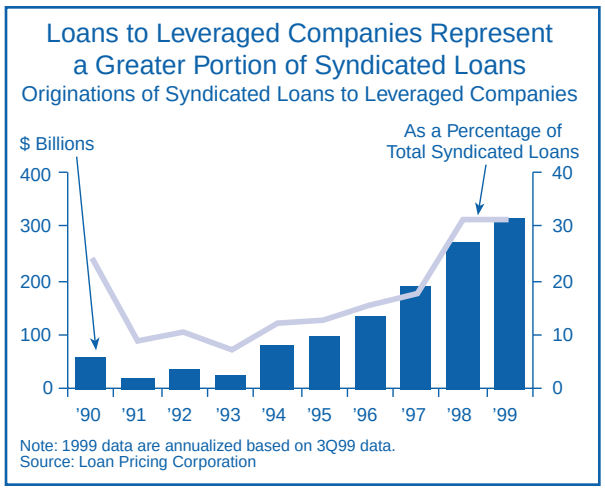


CHART 6



Leveraged lending volumes have recently been partially driven by M&A lending, which comprised over 30 percent of the total syndicated loan market in 1999. M&A activity approached $1.4 trillion in total volume during 1999, increasing the demand for capital and driving corporations to the loan market.[22] Approximately 22 percent of leveraged loans originated in 1998 were to the media and telecommunications industries, which have experienced significant levels of M&A activity.[23] Leveraged buyout activity contributed an additional 15 percent to leveraged lending volumes, surpassing 1998 levels in quantity.

Where Is Business Credit Quality Heading?

The future direction of business credit quality will be influenced by several factors, including the condition of the economy, growth in the indebtedness of corporate borrowers, exposure to vulnerable industry sectors, the interest rate environment, the development of emerging markets, and underwriting standards.

Economic growth will remain an important determinant of credit quality. Should economic growth slow and corporate profits decline, the demand for C&I loans is likely to fall, and problem asset levels are likely to rise. A recent S&P survey of global credit conditions noted that excessive credit, attributable to unsustainable corporate indebtedness and falling asset values, has weakened the financial systems of 20 nations. As for credit expansion in the United States, the survey noted that the ratio of private sector loans outstanding to gross domestic product rose from 101 percent in 1995 to 142 percent in 1999. S&P also noted evidence that banks' C&I loan portfolios may be relying too heavily on loan repayments based on projections that are realizable only if the current economic expansion continues. S&P estimates that 5 to 15 percent of bank loans could default should the United States experience a significant downturn in the stock market leading to a hard landing for the domestic economy.[24]

Continued growth in corporate indebtedness could contribute to increased losses and defaults. The growth rate of corporate debt has surpassed the growth rate of the economy in each year since 1994. A widening financing gap and increasing debt levels could pose problems if there are adverse changes in the interest rate environment or if corporate revenue growth slows. Rising rates will increase the costs of servicing debt, while a slowdown in revenue growth would reduce the cash flow available to service outstanding debt. Under such a scenario, business bankruptcies and failures are likely to rise, causing increased loan losses and bond defaults.

Lending to some industries involves high-risk exposures. Despite the strength of the U.S. economy, some domestic industries are continuing to experience stress. Exposures to weakened industry sectors, such as health care and oil and gas, could negatively affect C&I credit quality at insured institutions. One way to evaluate the relative riskiness of firms operating in a given industry is through ***KMV Corporation's***® Expected Default Frequency™ (EDF™) analysis. KMV Corporation® has developed a proprietary method of measuring the degree of credit risk inherent in corporate borrowers by calculating an EDF™ score to estimate the probability that a firm will default on its obligations within one year.[25] Chart 7 diagrams syndicated loan exposures along with December 1999 EDF™ scores and the direction of change since December 1998. This chart illustrates one measure of the risk associated with the 10 industry sectors having the highest expected default

[22] Houlihan Lokey's *Mergerstat.* www.mergerstat.com.
[23] "The Biggest Secret of Wall Street." May 14, 1999.
[24] "Global Financial System Stress: The Weak, the Vulnerable, and Those Limping Toward Recovery." Standard & Poor's. December 17, 1999.
[25] KMV's® proprietary calculation for EDF™ is based on (1) the current market value of the firm, (2) the structure of the firm's current obligations, and (3) the vulnerability of the firm to large changes in market value. Multiplying industry originations by median industry EDF™ scores provides an estimate of expected default volumes. This figure provides a more meaningful measure of aggregate lending risk exposure than pure origination volumes alone and can be used to rank industry exposures.

volume based on the volume of 1999 syndicated loan originations. In 1999, loans originated to mortgage lenders (including subprime lenders), communications firms, oil and gas firms, health care firms, and retail trade organizations generated the five highest expected default volumes among 50 broad industry sector classifications.

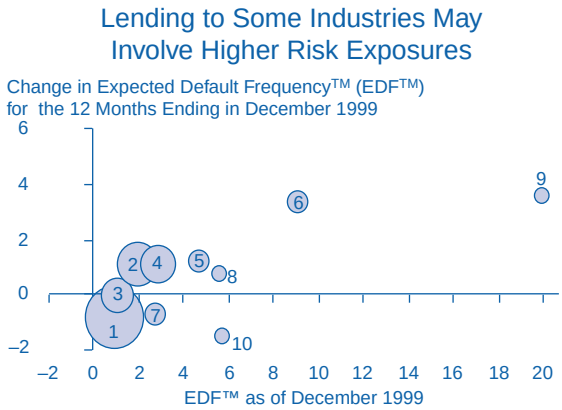
The interest rate environment and refunding risk affect the demand for and availability of credit. Declining interest yield spreads from 1996 to 1998 benefited borrowers. As spreads declined, the rate of syndicated loan growth increased and refinancing activity was high. Increases in spreads since 1998, along with higher interest rates, have caused refinancing activity to slow significantly. However, rising rates have not significantly affected origination volumes, as new debt continues to come into the market. Rising interest rates and refunding risk particularly affect speculative-grade borrowers. Higher interest rates would raise businesses' cost of borrowing, potentially decreasing the demand for business credit and impairing borrowers' ability to repay their debts. Once a corporation's debt service ability is compromised, access to new capital markets can become limited. A sharp rise in interest rates would particularly impair the ability of highly leveraged firms to repay floating-rate debt obligations.

Refunding risk continues to be a concern for speculative-grade borrowers as they face potential problems refinancing the maturing portions of long-term debt. The current tightening of terms in the C&I market and increasing default rates heighten refunding risk to borrowers. Rising interest rates or limited access to secondary markets could also increase refunding risk. This situation could continue to be problematic, since a rising volume of speculative-grade borrowings, consisting largely of unsecured bank debt, matures in 2001 and 2002. Specifically, $64 billion in speculative-grade debt matures in 2001 and 2002, and approximately 63 percent of the debt is unsecured.[26]

Potential growth in new markets presents both opportunities and challenges. The Internet and European syndicated loan markets represent both future potential growth areas and possible sources of credit risk for C&I lenders. The Internet has introduced large new markets to the loan and bond markets and has

[26] "Refunding Risk for Speculative Grade Borrowers." December 15, 1999.

Chart 7



Industry Name and Origination Dollars in Billions:
1. Communication Services - $234.6
2. Motor Vehicles and Parts - $133.1
3. Chemicals and Drugs - $96.1
4. Retail Trade - $92.1
5. Wholesale Trade - $46.5
6. Health Care Services - $42.3
7. Oil & Gas Extraction - $41.8
8. Entertainment - $33.5
9. Mortgage Lenders and Mortage-Backed Securities - $20.2
10. Hotels & Lodging Services - $20.2

Note: Data and bubble size represent total syndicated loan originations for the year ending 1999.
Sources: Securities Data Corporation; KMV Credit Monitor®

increased market efficiency. The "Internet economy" grew 68 percent from the first quarter of 1998 to the first quarter of 1999, with annual revenue expected to exceed $500 billion in 1999.[27] Internet technology has improved the efficiency of the syndicated loan markets, with recent changes including the development of public price reporting, credit ratings, and Internet sites for online trading.[28] Increased levels of credit risk could result from the volatility of Internet stock prices and the competitive disadvantage faced by firms that do not have an Internet presence but must compete against firms that do.

While the majority of syndicated loan financing currently occurs in the United States, analysts predict that syndicated lending activity in Europe will accelerate significantly because of increased cross-border competition generated by the introduction of the euro and new financing needs. In addition, the European high-yield bond market is still developing but produced $6.8 billion of volume in the third quarter of 1999, or 61 per-

[27] "Internet Indicators." The Center for Research in Electronic Commerce at the University of Texas Graduate School of Business. October 27, 1999.

[28] "Syndicated Loan Market Soars as Efficiency Increases." *The Wall Street Journal.* December 6, 1999.

cent of the total market.[29] Domestic lenders have begun to compete for this market but face credit risks because the European markets also pose sovereign and foreign exchange risk.

Underwriting Remains the Key to Assessing C&I Credit Quality

The August 1999 ***OCC Survey of Credit Underwriting Practices*** reported some tightening of commercial loan underwriting standards. However, loan officers also reported increased embedded risks in commercial loan portfolios for the fifth consecutive year. Survey respondents attributed the increased risks to weakened underwriting standards in previous years. The November 1999 ***Federal Reserve Board Senior Loan Officer Opinion Survey on Bank Lending Practices*** found that 30 percent of domestic banks reported increasing risk premiums, credit line costs, and loan spreads during the preceding three months. Loan officers cited an uncertain or unfavorable economic outlook, an expected worsening of industry-specific problems, and a reduced tolerance for risk as reasons for tightening C&I lending standards.

Despite signs of tightening underwriting standards, the mix of credits appears to be riskier than in recent times. The OCC issued an advisory to banks in May 1999 warning of potential problems with leveraged lending. The OCC stated that highly leveraged corporations could be particularly vulnerable to economic weakness and may not be able to compete effectively in a rising interest rate environment. The OCC also addressed reliance on enterprise value loans, which are often used to support leveraged lending. Enterprise values are calculations based on projections of the future income of a firm. If such estimates are overly optimistic, or if the company fails to meet the assumptions underlying these estimates, the lender may be subject to considerable credit risk. The last interagency SNC review also noted instances of inadequate documentation and support for enterprise loans.[30]

Summary

C&I lending is one of the largest and fastest growing lending lines at insured institutions. Recent growth in C&I lending can be attributed to a number of factors, including a favorable economy, merger and acquisition activity, and other sources of high loan demand, strong asset quality, aggressive pricing, and attractive fee income. While indicators of C&I loan performance remain generally strong, signs of deterioration in commercial credit quality have begun to surface. These signs are cause for some concern because they are surfacing during a period of remarkable economic strength. Increasing corporate indebtedness, signs of corporate stress, and adverse trends in corporate bond defaults suggest that an economic downturn could result in a much more challenging environment for business credit quality.

By Arlinda Sothoron, Senior Financial Analyst
Alan Deaton, Economic Analyst

[29] *LPC Gold Sheets,* Vol. XII, No. 44. Loan Pricing Corporation. November 15, 1999.

[30] Remarks by OCC First Senior Deputy Comptroller and Chief Counsel Julie L. Williams before the Robert Morris Associates Conference on Lending and Credit Risk Management, October 5, 1999.

Local Industries in the Global Economy

- **The contribution of international trade to U.S. economic activity has risen rapidly during the past decade. The U.S. economy has been increasingly influenced by conditions abroad, such as the recent financial market turmoil in several emerging markets.**

- **Canada, Japan, and Mexico are the largest U.S. trading partners, accounting for approximately 40 percent of U.S. trade. Western Europe and Asia (excluding Japan) also account for a large share of U.S. trade.**

- **The importance of trade at the industry level varies widely. The industries most dependent on trade, including machinery and transportation equipment, also account for a large share of U.S. trade.**

The value of goods and services traded on international markets has more than doubled during the past decade. More goods and services than ever are being shipped abroad and imported from all parts of the globe. Consequently, U.S. economic activity is increasingly influenced by the flow of goods, services, and capital across national borders.

The increasing importance of international trade is reflected in different types and levels of exposure to international markets. First, total exports and imports compared with overall economic activity confirm the increasing contribution of trade to the economy as a whole. Second, the amount of U.S. trade with foreign markets, although widely varied, is concentrated in a small number of countries, namely Canada, Japan, and Mexico. Consequently, economic conditions in these countries are particularly important in assessing the influence of global economic conditions on U.S. trade. Third, the level of exposure to international trade across industry sectors varies considerably. Some industries are not influenced greatly by activity in international markets, while for other, more trade-dependent industries, conditions in the world economy are an important factor in determining the level of sales and profit. The exposure to international markets, either through reliance on trade with particular countries or via industries with a significant exposure to international markets, is an important consideration for lenders seeking to determine a firm's future profitability and financial condition.

International Trade Is of Growing Importance

Over the past 30 years, international trade has grown more quickly than the economy as a whole. Exports, which include both merchandise and services, have risen from less than 5 percent of U.S. gross domestic product (GDP) in 1970 to approximately 12 percent today. The merchandise component accounts for about 73 percent of exports and includes manufactured goods, agricultural products, and raw materials such as metals and oil. The services component of exports, accounting for about 28 percent of total exports, includes travel services, passenger fares, royalties, freight and port services, and a number of smaller sectors such as financial and educational services.

Imports also account for a growing share of U.S. consumption of goods and services, exceeding 15 percent of U.S. GDP in 1999, up from 6 percent in 1970. Merchandise is the largest component of imports, accounting for 83 percent, while services account for 17 percent (see Table 1, next page).

Although trade in services has grown quickly for many years, merchandise still accounts for the majority of all trade. The dominance of merchandise is attributable, in part, to the difficulty of trading many types of services. With few exceptions, services are generally produced and consumed within a local market because they cannot be transported easily and are subject to language and cultural barriers. Hospitals, dry cleaners, and movie theaters, for example, serve well-defined local markets and produce products that cannot be traded competitively on international markets. Although trade in services such as travel continues to grow, the remainder of this article focuses primarily on the dominant merchandise component.

U.S. Trade Activity Has Reflected Recent Global Economic Turmoil

Over time, conditions in the international economy have become an increasingly important influence on U.S. growth, since a rising share of all domestically produced goods and services is sold abroad. Similarly, an increasing volume of imported goods and services implies a higher level of competition for domestic producers that compete directly with imports.

Table 1

Merchandise Is the Largest Component of Trade

	Dollar Value* (1998, $ millions)	Percent of Total	1999 Growth**
Exports	**$ 933,910**	**100.0%**	**1.8%**
Merchandise	682,138	73.0%	0.8%
Agriculture and Related Commodities	26,603	2.8%	–1.8%
Mineral Commodities	6,644	0.7%	–17.4%
Manufactured Goods	593,297	63.5%	–0.1%
Other Merchandise	55,593	6.0%	39.5%
Services	263,662	28.2%	4.3%
Travel	71,250	7.6%	3.0%
Passenger Fares	19,996	2.1%	2.7%
Royalties and License Fees	36,807	3.9%	4.1%
Freight and Port Services	25,520	2.7%	6.4%
Other Services	110,089	11.8%	5.0%
Adjustments***	(11,890)		
Imports	**$ 1,098,193**	**100.0%**	**10.3%**
Merchandise	907,647	82.6%	10.4%
Agriculture and Related Commodities	22,859	2.1%	–2.2%
Mineral Commodities	38,619	3.5%	5.6%
Manufactured Goods	803,384	73.2%	11.6%
Other Merchandise	42,786	3.9%	–0.6%
Services	181,015	16.5%	9.6%
Travel	56,105	5.1%	7.2%
Passenger Fares	19,797	1.8%	8.3%
Royalties and License Fees	11,293	1.0%	11.0%
Freight and Port Services	30,460	2.8%	11.4%
Other Services	63,360	5.8%	10.9%
Adjustments***	9,531		

* Sum of components may not equal total due to rounding.
** First three quarters of 1999 versus first three quarters of 1998.
*** Because of different methods of estimating the merchandise and services components of trade, an adjustment term is necessary. Consequently, percentages may not sum to 100.
Sources: Bureau of Economic Analysis; Bureau of Census

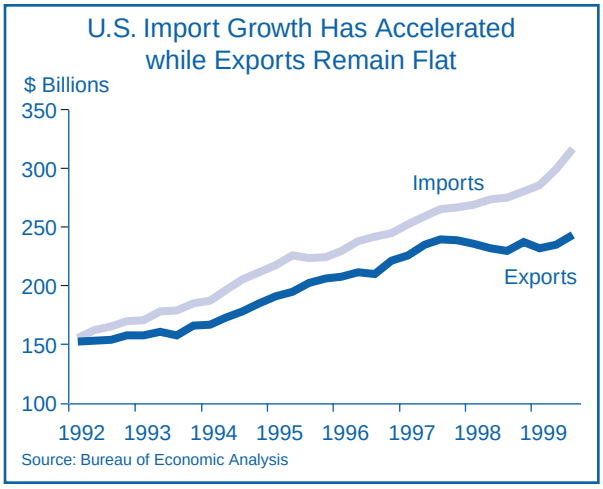
During the past two and a half years, for example, the international economy has been buffeted by a series of crises that resulted in steep exchange rate depreciations for a number of countries and a marked slowdown in economic growth in many emerging markets. Although the U.S. economy remained surprisingly strong during the worst of the emerging markets crises, the fallout was evident in the diverging performance of U.S. exports and imports over the period.

From mid-1997 through mid-1999, U.S. exports were generally flat, reflecting the sluggish pace of growth in several important U.S. export markets. Export prices fell by 4 percent over the period in response to weak demand for U.S. exports. In particular, exporters of agricultural products, basic manufactured goods, and commodities faced rapidly deteriorating conditions in several important overseas markets. For example, the value of merchandise exports to the Pacific Rim fell by 15 percent during the first six months of 1999 compared with the same period in 1997 because of the recent financial market turmoil in the region.

U.S. imports continued to grow during the period, however, reflecting both strong demand for imported goods and falling prices. In fact, average import prices fell by 5 percent between 1997 and 1999. At the same time, competition from imports limited the pricing power of domestic producers that compete with goods produced abroad. Although producers that compete with cheaper imports experienced adverse effects on profitability, consumers and firms that purchased goods from abroad generally benefited from falling import prices.[1]

The slowdown in U.S. export activity and the acceleration of import growth have resulted in an increasing trade imbalance (see Chart 1). The U.S. trade deficit, which reached a record $26.5 billion in November, has raised concerns among analysts about the vulnerability of the dollar. Faster growth abroad or a slowdown in U.S. growth could convince foreign investors to increase purchases of assets outside the United States, resulting in a sell-off of the dollar. Depending on the severity and speed of a sell-off, heightened financial market volatility and rising U.S. import prices could result. Although potentially many forces are at work in such a scenario, rising inflation or a falling dollar may ultimately result in higher interest rates and slower U.S. growth. The extent to which U.S. trade would be affected by such a scenario is difficult to assess, since changes in the prices of either imports or exports would result in both positive and negative effects on firms' costs, revenue, and profitability.[2]

CHART 1



Most U.S. Trade Is Concentrated in a Few Foreign Markets

Because the United States trades with most nations, economic conditions abroad are one of the critical factors that determine the growth of U.S. trade. Foreign demand for U.S. goods and services depends on the strength of the markets to which exporters ship their goods. Consequently, economic weakness abroad often results in slower U.S. export growth. Economic conditions abroad also influence the level of import competition that U.S. firms experience. Foreign firms facing slack demand in their own domestic markets, much like manufacturers in Southeast Asia during the recent market turmoil, may

[1] Weak import prices are a factor cited by analysts to explain the benign performance of U.S. inflation during the past few years.

[2] During the early 1980s, the dollar rose by roughly 50 percent, as measured against a trade-weighted basket of currencies. The increase in the value of the dollar made U.S. exports much more costly on world markets and contributed to financial stress among export-dependent manufacturers and agriculture producers. Beginning in mid-1985 the dollar fell sharply, back to its pre-appreciation level. The resulting improvement in U.S. competitiveness contributed to robust growth in U.S. exports that lasted during the rest of the 1980s.

reduce prices of their U.S.-bound goods to compete more effectively with U.S. producers.[3]

Although the U.S. trades with many nations, a large share of U.S. trade is concentrated among a small number of countries. Canada, Mexico, and Japan account for more than 40 percent of merchandise exports and imports. Asia (excluding Japan) and Western Europe each account for just over 20 percent of U.S. exports and a broadly similar share of imports. Central and South America, despite proximity to the United States, account for less than 10 percent of exports and only 5 percent of imports (see Chart 2).

The United States has routinely run a trade deficit with its largest trading partners. The trade deficit with Canada was $22.8 billion through the first three quarters of 1999. The trade deficit with Mexico topped $18.8 billion during the same period. The trade deficits with Japan and China, by far the two largest at $53.4 billion and $49.4 billion, respectively, accounted for approximately 40 percent of the total U.S. merchandise trade deficit through the first three quarters of 1999.

The Importance of Trade Varies among Industries

The level of export activity or the intensity of import competition also varies across industries. Besides the overall dollar volume of exports, industries differ in the proportion of total production that is exported. Although some industries, such as leather products, account for a relatively small share of total U.S. exports, exports from this industry make up a large share of all U.S. leather goods production. In cases such as this, conditions in export markets are important for producers even if total export sales from a particular industry are small.

Industries also differ in the share of total spending devoted to imports. Imports account for a relatively small portion of all domestic spending on farm products such as grains and livestock, for example, while imports account for a relatively large share of all U.S. oil consumption. These differences expose U.S. industries to varying levels of competition from abroad. In industries characterized by high levels of import competition, import prices may largely shape the domestic pricing environment and, by extension, the revenue and profit growth of domestic firms.

Chart 2

For the purposes of this article, industries can be assigned to one of three broad categories depending on their exposure to international markets either through exports or through the intensity of import competition. Firms in *Less Exposed Industries* are not directly influenced by conditions in the global markets. Export markets are not a particularly important source of revenue, and imports are a negligible share of all domestic consumption of goods produced by these industries. In contrast, some industries are highly exposed through their reliance on export markets, through competition from imports, or in some cases, through both. For firms in these *Highly Exposed Industries,* conditions in international markets are clearly one of the important factors influencing current and prospective financial performance. Industries not part of either group, or *Moderately Exposed Industries,* face some competition from abroad and may earn a relatively small amount of revenue from export markets.

To gauge these differences more fully, a measure of exposure to international markets was calculated for a set of 26 industries (20 manufacturing industries, 4 mining industries, and 2 agriculture sectors). Table 2

[3] From the perspective of a foreign exporter, increased sales of goods abroad, even at reduced prices, may be a preferred strategy to offset lower sales within its own weaker domestic market. A foreign steel mill facing weak sales in its home market may choose to sell its output below cost on the world market if it can still cover its fixed costs of operation. There also may be an incentive to maintain or even expand market share and recoup current losses in the future when prices rebound.

Table 2

Industry Exposure to International Trade

Export Share of U.S. Production	Import Share of U.S. Consumption: Low	Import Share of U.S. Consumption: Medium	Import Share of U.S. Consumption: High
Low	Printing and publishing Food products	Lumber and wood products Petroleum and coal products Agricultural services, forestry, and fishing Furniture and fixtures	Oil and gas extraction
Medium	Coal mining Tobacco products Nonmetallic minerals, except fuels Fabricated metal products	Metal mining Paper and allied products Textile mill products Stone, clay, and glass products Rubber and plastic products Primary metal industries	Miscellaneous manufacturing industries Apparel products
High	Farm products	Chemicals and allied products Instruments and related products	Transportation equipment Industrial machinery and equipment Electronic equipment Leather and leather products

Highly Exposed Industries
Moderately Exposed Industries
Less Exposed Industries

summarizes the results of the assessment.[4] Each row shows industries that have high, medium, or low reliance on export markets, defined as the share of U.S. production in a particular industry that is exported. Each industry was ranked by this measure, with the 7 highest industries placed in the High category, the 7 lowest in the Low category, and the remaining 12 in the Medium category.[5] Table 2 shows, for example, that a relatively low proportion of production in the printing and publishing, lumber and wood products, and oil and gas extraction industries is exported. In contrast, a relatively high percentage of production in the farm products sector, chemicals, and transportation equipment industries is exported.

[4] Export share of production (rows in Table 2) was calculated as the ratio of inflation-adjusted exports at the industry level divided by inflation-adjusted production in that industry (Gross Output by Industry from the Bureau of Economic Analysis was used as a measure of industry production). The import share of consumption (columns in Table 2) was calculated as the share of inflation-adjusted industry imports divided by inflation-adjusted domestic production less exports plus imports. All calculations were based on 1997 data, the latest industry-level production data available.

[5] This allocation, while completely arbitrary, roughly corresponds to a distribution where 50 percent of the industries are assigned to the Medium category, with the remaining 50 percent evenly allocated between the High and Low categories. Breakpoints for the distribution of industries by export share of production were as follows: Low: less than 7 percent; High: greater than 13 percent.

The industries in each column are categorized by the share of U.S. consumption expenditures in a particular industry that are satisfied by imports. Again, the Low and High categories each include 7 industries, and the Medium category includes the remaining 12 industries.[6] On the basis of this analysis, for example, a relatively low share of U.S. consumption of food, fabricated metals, and farm products is imported. In contrast, a large share of U.S. consumption of oil, apparel, and electronic equipment is imported.[7]

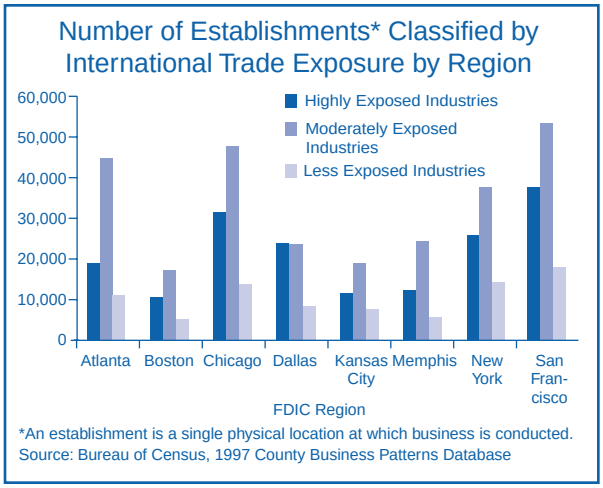
As shown in the lower right cell of the table, four industries are highly exposed to both export markets and import competition. These industries—transportation equipment, industrial machinery, electronic equipment, and leather products—account for slightly less than half of total U.S. exports and a similar percentage of total U.S. imports. Not only are these industries more closely tied to international markets than most other industries examined, but they also account for a large share of U.S. international trade.

Using the terminology introduced above, Highly Exposed Industries are defined as those assigned to either of the High categories; industries in this group either are very reliant on export markets or face high levels of import competition. Less Exposed Industries are defined as those that have little exposure to either export markets or import competition; they are shown in the upper left cell in the Low classification. The remaining industries are defined as Moderately Exposed Industries.

Chart 3 illustrates the distribution of establishments in each of the three categories by Region.[8] Among the group of industries analyzed, most are in the Moderately Exposed Industries category. Of the FDIC Regions, Atlanta, Chicago, and San Francisco have the greatest number of establishments in this category. The Chicago and San Francisco Regions lead in the number of establishments in the Highly Exposed Industries group, followed by the New York and Dallas Regions.[9] Less Exposed Industries account for a relatively small number of establishments. As suggested above, however, most service-sector, construction, and government enterprises, while not part of this analysis, could be classified as Less Exposed.[10]

Although this analysis highlights the varying level of direct exposure to international markets, industries also may be exposed through a less direct secondary channel. Several industries, although not highly exposed themselves, are suppliers to Highly Exposed Industries. For example, the rubber and plastics industry produces goods that are used in the manufacture and assembly of transportation equipment, a Highly Exposed Industry.

Chart 3



[6] Breakpoints for the distribution of industries by import share of consumption were as follows: Low: less than 9 percent; High: greater than 25 percent.

[7] Although not directly included in the analysis, most domestically produced services also have minimal reliance on export markets and face little import competition. Retail trade, construction, local transportation services, and government, for example, all operate in relatively sheltered markets and are dependent on the health of the local economy. Particular firms may engage in high levels of international activity in tradable services such as travel, but manufacturing, mining, and agriculture account for the majority of imports and exports.

[8] An establishment is defined as a single physical location at which business is conducted or services or industrial operations are performed. It is not necessarily identical with a company or enterprise, which may consist of one or more establishments. Data are from *County Business Patterns* (Bureau of Census, 1997).

[9] An alternative way of analyzing the establishment data is to calculate the percentage of all establishments across the 25 industries that are in Highly Exposed Industries. On the basis of this calculation, the Dallas Region ranks highest at 42 percent because of the large number of establishments engaged in oil and gas extraction. For the remaining Regions, the percentages vary between 25 percent and 35 percent. Across all industries (including services and other sectors not part of this analysis), the percentage of Highly Exposed Industries in each Region ranges from 1.7 percent (Atlanta Region) to 3.4 percent (Boston Region) of total establishments.

[10] These data do not include a count of establishments in the farm products sector (Standard Industrial Code (SIC) 01 and SIC 02). Therefore, 25 industries are represented in the establishment data, and not 26 as in Table 2.

Consequently, conditions in export markets for transportation equipment are of particular interest for manufacturers of certain types of rubber and plastic products. These supplier industries are also vulnerable to import competition through this secondary exposure to international markets. A transportation equipment manufacturer, in response to heightened competition in international markets for its products, may switch from a domestic supplier of rubber products to a cheaper foreign supplier if a favorable price differential emerges. Therefore, assessing the exposure of industries to either exports or imports requires consideration of any secondary linkages between suppliers and purchasers of industry products.

Summary

The contribution of international trade to overall U.S. economic activity has been increasing for a number of years. The growing significance of trade has been highlighted by the recent series of economic and financial crises across the globe. One result of recent global economic turmoil has been a slowdown in U.S. export growth resulting from both slumping international demand for U.S. goods and services and weak prices. Import growth has continued unabated, largely because of strong U.S. growth, leading to a rapidly widening trade deficit. The effects of import and export growth on particular industries vary because of differing levels of reliance on export markets and the extent of import competition. This analysis suggests that several industries are highly exposed to changing global economic conditions. Lenders should be aware that for firms in these industries, changes in global economic conditions, including demand for U.S. exports and prices of both imports and exports, largely determine pricing, revenue growth, and profitability.

Paul C. Bishop
Senior Financial Economist

Regional Perspectives

- **Banks and thrifts in the Dallas Region continue to report strong earnings and solid credit quality. However, loan loss reserves relative to loans and noncurrent loans are declining and are the lowest among the eight FDIC Regions.**

- **Agricultural producers' operating profitability is suffering as commodity prices continue a three-year decline; record government payments have maintained net farm income.**

- **While agricultural banks reported strong financial ratios, a substantial increase in carryover debt prompts concerns about deteriorating credit quality at these banks.**

- **NAFTA expanded the flow of goods and capital among the United States, Canada, and Mexico; however, its effects on job growth in the United States and the Region were only marginally positive.**

Dallas Region Financial Institutions Stay on Track

Overall, banks and thrifts in the Dallas Region continue to report strong earnings and solid credit quality (see Table 1). The Region's financial institutions reported a combined return on assets (ROA) of 1.32 percent for the third quarter of 1999, just slightly below the national average. Reported equity for the Region's institutions is strong as measured by the 8.05 leverage ratio, essentially unchanged compared with the third quarter of 1998. Past-due rates for the Region are higher than those for the nation; however, charge-off rates are lower.

One area that will bear watching in future quarters is the declining loan loss reserve coverage. As of September 30, 1999, the Dallas Region reported a loan loss reserve to gross loans ratio of 1.23 percent, which is 9 basis points below the Region's 12-month average, 35 basis points below the national average, and the lowest ratio among the eight Federal Deposit Insurance Corporation (FDIC) Regions. A mitigating factor is that the Region's charge-offs are relatively low, resulting in a ratio of net charge-offs to gross loans of 0.39 percent, compared with 0.50 percent for the nation. Some large banks reported declines in the allowance for loan loss coverage of noncurrent loans, and most small banks also follow this trend. As of September 30, 1999, the Region's small commercial banks (less than $100 million in total assets) reported a loan loss reserve to noncurrent ratio of 120 percent, or 20 percentage points below all small commercial banks in the United States. However, the

Table 1

Dallas Region Profitability Remains Strong during the Third Quarter of 1999

Percentage	U.S.	Region	Colorado	New Mexico	Oklahoma	Texas
Return on Assets	1.35	1.32	1.56	1.33	1.30	1.28
Return on Equity	15.80	15.95	20.83	15.95	14.67	15.45
Net Interest Margin	3.94	4.28	5.14	4.57	4.19	4.13
Leverage Ratio	7.83	8.05	7.68	8.10	8.19	8.08
Loan-to-Asset Ratio	62.01	58.22	53.06	54.47	61.51	58.78
Past-Due Loans	2.04	2.24	1.83	2.59	2.19	2.29
Charge-off Rate	0.50	0.39	0.37	0.35	0.31	0.41
Reserve to Gross Loans Ratio	1.58	1.23	1.32	1.40	1.41	1.17
Reserve to Noncurrent	171.55	118.58	195.76	126.58	123.17	109.28
Percent Unprofitable	**7.02**	**6.34**	**6.00**	**4.62**	**6.69**	**6.42**

Source: Bank and Thrift Call Reports, September 30, 1999

Region's small commercial banks also report consistently higher charge-off rates, averaging 12 basis points higher than small commercial banks in the nation over the past three years. Thanks to a very strong economy, loan loss reserves have proven adequate to cover charge-offs incurred over the past several years. Should the economy weaken, however, and loans begin to deteriorate, many institutions may find themselves without adequate buffers against future losses.

Concerns Elevate for Banks with Large Agricultural Exposure

Increasing domestic and global agricultural production and a decline in agricultural demand over the past three years led to increasing inventories of key commodities, including corn, wheat, soybeans, rice, and cotton. Each of these commodities is important to the Region's agricultural production mix. The Dallas Region exported $4.6 billion in agricultural goods in 1997, accounting for 70,100 jobs.[1]

The livestock industry, which represents 66 percent of the Region's total agricultural cash receipts, began improving in mid-1998. Livestock-sector cash receipts for 1999 are forecast to grow 2 percent, the second highest level attained in the 1990s, helping to mitigate problems in other agricultural sectors. However, weak prices and declining demand pose a looming threat to the West **Texas** cotton industry, which produces 25 percent of the nation's cotton fiber. Moreover, poor yields that resulted from drought conditions in 1996 and 1998 left many cotton producers financially weakened, making many who depend on the cotton industry even more vulnerable to a prolonged period of low cotton prices.

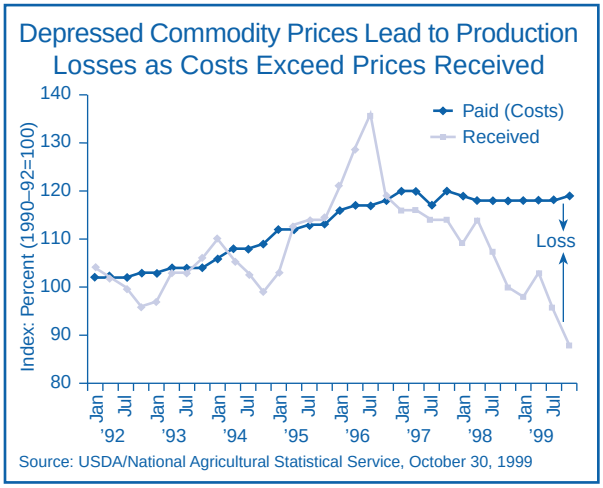
Expanding Supply and Weakened Demand Depress Agricultural Exports and Prices

In 1999/2000, average prices for corn, wheat, soybeans, rice, and cotton fell from record or near-record levels in 1996–97 to the lowest in more than a decade. Total 1999 cash receipts are forecast to decline 3 percent to $192 billion from a year earlier and 8 percent from the 1997 peak. Reduced cash receipts are attributable to extremely low bulk commodity prices (down 14 percent from 1998 and 24 percent from 1997), which are at or below break-even for most producers. Three years of declining prices place many of these producers in a net operating loss[2] position (see Chart 1).

A drop in export demand resulted in sharp increases in commodity inventories, driving prices to record low levels. Given large world inventories, this problem will likely persist, with relief coming slowly over several years. Commodity prices reached high levels in the mid-1990s, prompting an increase in domestic and foreign production acreage. Producers in Brazil and Argentina stepped up production of agricultural commodities, particularly soybeans. For example, Argentina's acreage and yield increased 25 and 45 percent from 1995/96 levels, respectively. Brazil expanded acreage and yield by 15 and 26 percent, respectively, in the same period. These dramatic shifts in supply stem from advances in genetic varieties, infrastructure investment, and policy reform in both countries. Another important factor was the development of China's greater self-sufficiency in basic foodstuffs in the mid-1990s. China moved from being the world's largest wheat importer, requiring only modest grain imports, to a net exporter of rice and corn. These events drastically changed global supply, adversely affecting the price of commodities.

U.S. agricultural exports declined 18 percent, from $59.8 billion in 1996 to $49 billion in 1999. The financial turmoil in Asia, Russia, and Brazil is contributing to a decrease in demand for agricultural exports. In addition, a generally appreciating U.S. dollar is causing U.S. commodities to become relatively more expensive in world markets.[3]

CHART 1



[1] U.S. Agricultural Development Council.

[2] Net operating income (or loss) does not include government payments.

[3] USDA Agricultural Outlook, "The Ag Sector: Year-End Wrap-Up," December 1999.

Genetically modified organisms (GMOs) are another factor threatening future export recovery and growth. GMOs alter the genes of some crops, primarily corn, cotton, and soybeans, rendering them resistant to certain pests and herbicides. Consumer skepticism over the safety of GMOs recently intensified in the European Union (EU) and Japan, prompting foreign governments to enact restrictive measures affecting importation of GMO material in finished products and raw materials. The U.S. agricultural industry produces the majority of the world's GMOs. Approximately 33 percent of corn, 55 percent of soybeans,[4] and 45 percent of cotton[5] are grown in the United States using GMO technology.

Key U.S. agricultural commodity importers, particularly the EU and Japan, have slowed purchases of U.S. commodities because of the amount of acreage dedicated to GMO varieties and the commingling of GMO and non-GMO commodities in the distribution process. For example, U.S. corn exports to the EU averaged 2.1 million tons over seven years ending 1996/1997; however, during the past two years corn exports have averaged 160,000 tons, a difference of almost 2 million tons a year.[6] The EU chose instead to import corn from Argentina and Eastern Europe. Moreover, approximately one-third of U.S. corn is exported to Japan,[7] which recently enacted stringent labeling legislation similar to the EU standards. In addition, 64 percent of U.S. soybeans are exported to countries caught up in the GMO debate.[8] Consequently, GMOs compound the problem of declining U.S. agricultural export demand.

Loan-to-Asset Study Raises Concerns about Current Agricultural Loan Levels

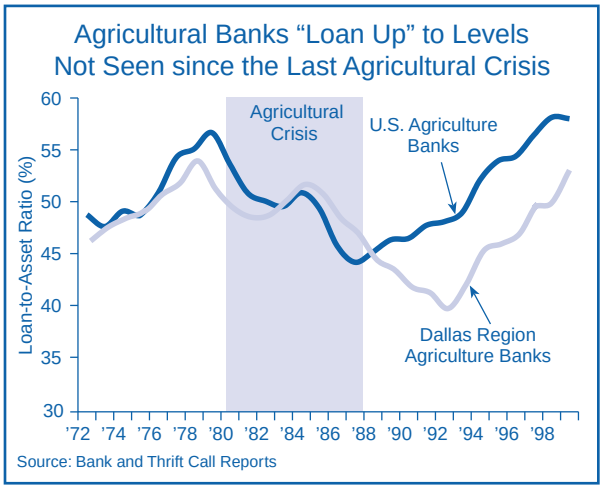
Underlying conditions differ between the agricultural crisis of the mid-1980s and today; one study relevant to this analysis is entitled "The Effects of Management Decisions on Agricultural Bank[9] Failures."[10] The study concludes that factors other than the local economy contributed to the problems in the 1980s. The findings suggest that agricultural banks that were willing to accept higher levels of risk, as evidenced by higher loan-to-asset ratios, were more susceptible to failure.

Agricultural banks' loan-to-asset ratio increased steadily during the 1970s, peaking with the beginning of the last agricultural crisis (see Chart 2). The ratio subsequently declined as agricultural banks reduced loan exposure. Beginning in 1988, agricultural banks began "loaning up." The loan-to-asset ratio currently stands at 58 percent, which is higher than the 1979 peak. While Dallas Region agricultural banks' loan-to-asset ratio has tracked below the ratio for the nation's agricultural banks since 1988, the Region's banks are similarly "loaning up" to levels not seen since the last agricultural crisis.

1999 Congressional Outlays of $22.5 Billion Highlight Agricultural Industry Problems

Increased credit exposure for agricultural banks and adverse agricultural economic conditions warrant close monitoring by producers, bankers, and regulators. However, the record level of government payments helps to

CHART 2



[4] Schuff, Sally, "Clumsy Harvest, but Biotech Looks Good in the Future," *Feedstuffs,* October 11, 1999.
[5] Gardiner, Walter, "Biotech Crops—Opportunities and Risk," Farm Credit Administration, Office of Policy and Analysis Draft, October 8, 1999.
[6] USDA/ERS, "Update on Bt Corn and Other New Technology," *Feed Yearbook,* April 1999.
[7] Zavon, Juliet A., "Biotechnology Causes Turmoil for U.S. Grain Companies," *Feedstuffs,* October 18, 1999.
[8] Muirhead, Sarah, "Attention on GM Grains, Oilseeds Becomes That of Consumer Acceptance," *Feedstuffs,* October 4, 1999.

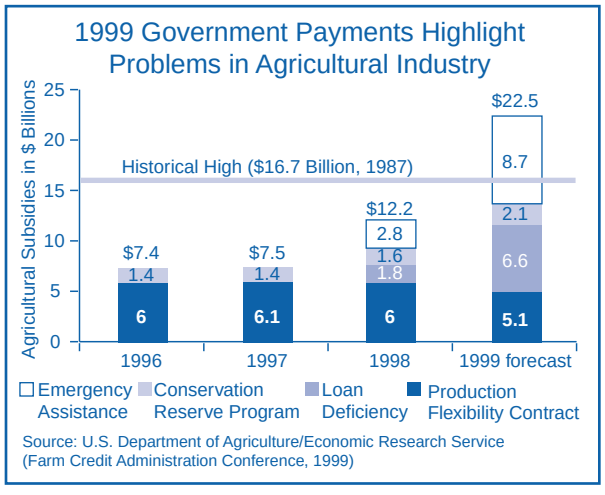
[9] Agricultural banks are defined as banks with agricultural loans greater than 25 percent of total loans.
[10] Belongia, Michael T., and R. Alton Gilbert, "The Effects of Management Decisions on Agricultural Bank Failures," *American Journal of Agricultural Economics,* November 1990, p. 901.

mitigate the immediate threat to farm producers. This year government payments reached $22.5 billion, a record high (see Chart 3).

The U.S. government has increased the level of agricultural aid since the passage of the 1996 FAIR Act.[11] With changes in global production and shifts in demand for U.S. agricultural goods, some analysts are questioning whether a new, lower price equilibrium[12] exists for bulk commodities. Continued cash infusion from the U.S. government prevents the markets from correcting as intended by the 1996 FAIR Act. Many analysts agree that several factors, some of which are occurring now, must align in global supply and demand for prices to rebound. These factors include the following:

- Global planted acreage has begun to decline as producers adjust to low prices.
- Countries in crisis must continue to recover in order for U.S. exports and prices to increase. Recovery in South Korea and Thailand began sooner than expected. However, the future strength of recovery in other countries is questionable. In addition, Russia and other countries in the former Soviet Union continue to experience declining financial stability and have no turnaround in sight.
- At some point the stretch of good global weather should end and output should drop; however, large inventories of bulk commodities will slow price response to reduced yield.
- Strong macroeconomic performance is needed in developed countries to spur U.S. agricultural exports. Strength in developed countries' economies influences the economies of developing countries. Developing countries are the largest growth area for agricultural exports.[13]

CHART 3



The unprecedented government outlay bolstered net cash income, which for 1999 is expected to total $57.9 billion, up $3 billion from 1998 and just $600 million below the 1997 record. Government payments this year represent 12 percent of cash receipts and 39 percent of net farm income. Continuation of this level of support is neither realistic nor a viable long-term solution. These payments help insulate agricultural producers and their lenders from the effects of present stress in the agricultural sector. Without these payments, many institutions would likely be facing a significantly higher level of asset-quality deterioration.

Agricultural Banks Have Withstood Industry Woes…So Far

As government payments have maintained agricultural profitability, the effects of depressed commodity prices have not yet shown up in bank financial statements. As of third quarter 1999, agricultural banks nationwide reported a combined ROA of 1.30 percent, 19 basis points higher than all commercial banks under $100 million (see Table 2, next page). Agricultural banks in the Dallas Region reported a strong 1.40 percent ROA, the highest for the past 12 quarters. However, this level of profitability may be attributed in part to the fact that a large percentage of agricultural banks have elected Subchapter S status. While past-due rates for the Region's agricultural banks are higher than for all banks in the Region and nation, charge-off rates are lower. Equity for agricultural banks is likewise strong, with Dallas Region agricultural banks reporting a leverage ratio that is 40 basis points higher than that reported by similarly sized commercial banks in the Region.[14] Due in large measure to government support, the Region's agricultural banks have yet to show signs of deterioration in key operating measures. However, as reported by

[11] Federal Agricultural Improvement and Reform Act of 1996.
[12] A shift in price equilibrium occurs when fundamental supply and/or demand factors are affected permanently or for an extended period of time resulting in a new price.
[13] USDA Agricultural Outlook, "The Ag Sector: Year-End Wrap-Up," December 1999.
[14] Commercial banks with assets less than $100 million.

Table 2

Dallas Region Agricultural Banks Still Going Strong

	U.S.			Region		
	Agricultural Banks	All Insured Institutions	Commercial Banks under $100 Million	Agricultural Banks	All Insured Institutions	Commercial Banks under $100 Million
Return on Assets	1.30	1.35	1.11	1.40	1.32	1.30
Return on Equity	12.38	15.80	10.06	13.17	15.95	12.72
Net Interest Margin	4.28	3.94	4.50	4.55	4.28	4.87
Leverage Ratio	10.46	7.83	10.98	10.62	8.05	10.22
Loan-to-Asset Ratio	60.96	62.01	60.20	53.05	58.22	52.97
Past-Due Loans	2.49	2.04	2.36	3.03	2.24	2.73
Charge-off Rate	0.21	0.50	0.23	0.38	0.39	0.38
Percent Unprofitable	3.55	7.02	9.54	4.05	6.34	7.53
Total Assets ($ Billions)	126.20	6,655.90	245.40	19.00	337.70	40.90
Count	**2,224**	**10,271**	**5,241**	**321**	**1,389**	**890**

Source: Bank and Thrift Call Reports, September 30, 1999

the FDIC's September 1999 ***Report on Underwriting Practices:***

> Thirty-seven percent of the FDIC-supervised banks active in agricultural lending showed a "moderate" increase in the level of carryover debt (up from 29 percent during the previous reporting period) and 5 percent showed a "sharp" increase (up from 3 percent previously).

Increasing carryover debt suggests mounting stress for many individual borrowers. A prolonged period of low prices could compound borrower problems, resulting in a decline in profitability and lower capital cushions for many agricultural lenders. Institutions with higher levels of credit exposure may be particularly vulnerable.

NAFTA: Five Years Later

The North American Free Trade Agreement (NAFTA), among Canada, Mexico, and the United States, entered its sixth year on January 1, 1999. While there are studies detailing the effects of NAFTA on the U.S. economy, few have examined its effects on a state or regional basis. The remainder of this article examines trends in export growth from the Dallas Region to NAFTA countries since NAFTA's implementation on January 1, 1994, and draws some conclusions about NAFTA's effects on the Region's economy.

What Is NAFTA? NAFTA is a comprehensive rule-based agreement among the United States, Canada, and Mexico that eliminated many tariffs immediately; those tariffs not eliminated immediately are to be phased out over a 5- to 15-year period. In addition to tariff reductions, NAFTA opened previously protected markets (e.g., agriculture, textiles), established rules for government procurements and intellectual property rights, and set up procedures to deal with trade disputes. In 1993, one year before NAFTA was implemented, Mexican tariffs on U.S. goods averaged 10 percent, while U.S. tariffs on Mexican goods averaged 4 percent. Today, Mexican tariffs on U.S. goods average 2 percent, while U.S. tariffs on Mexican goods average less than 1 percent.[15] NAFTA created a North American market with a combined 1994 gross domestic product (GDP) of $7.7 trillion and 368 million consumers.[16]

[15] Jamar, Christen, and Angelo Young, "NAFTA @5," *MB* (Mexico City), April 1999.

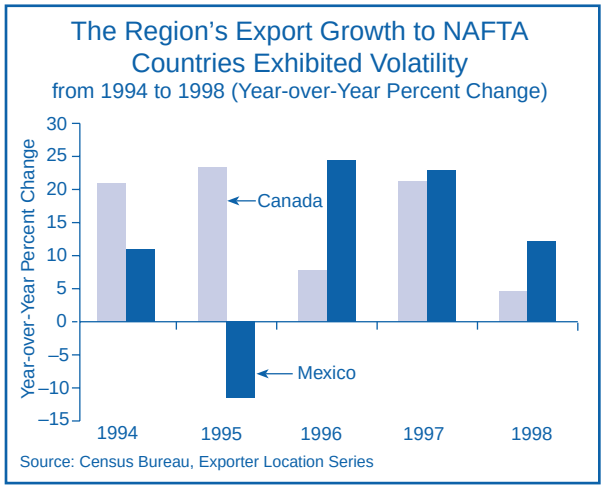
[16] Kengor, Paul, Research Fellow for the Allegheny Institute for Public Policy, Texas Public Policy Foundation, "The Effect of NAFTA on Texas," August 1999.

Measuring NAFTA's Effects. Most NAFTA studies concentrate largely on jobs and wages, and the conclusions vary considerably. For example, the AFL-CIO estimates that between 300,000 and 400,000 Americans have lost jobs since NAFTA's implementation, while the U.S.-Mexico Chamber of Commerce maintains that 1.7 million export-related jobs were created in the United States, largely as a result of NAFTA.[17] Few studies attempt to estimate the number of jobs gained (or lost) on a state or regional level; however, a study conducted by the ***Texas Public Policy Foundation,*** using Department of Commerce calculations, reports that 190,000 new jobs were created in Texas as a result of NAFTA.[18] State export data further illustrate NAFTA's influence on the Region.

NAFTA's Results. Export growth from the Dallas Region to NAFTA countries between 1993 and 1998 can be described as follows:

- Exports from the Dallas Region to Canada and Mexico have grown strongly under NAFTA (see Chart 4). The Region's exports to NAFTA countries totaled $33 billion in 1998, a gain of almost $14.5 billion, or 77.7 percent, from 1993. Approximately 45 percent of the Region's exports in 1998 were destined for either Canada or Mexico. U.S. exports (minus the Dallas Region) to NAFTA countries exceeded $200 billion in 1998, a gain of almost $77 billion since 1993, or 62.4 percent.[19]

CHART 4



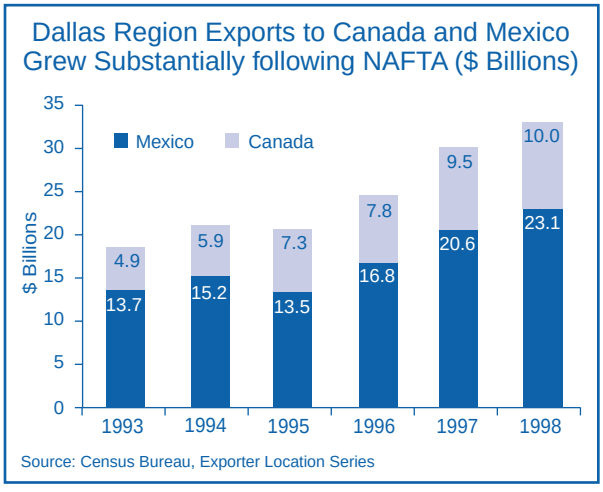
- Although the Region's export growth to non-NAFTA countries was not as rapid, its exports to the rest of the world grew by 58.7 percent, or $15.2 billion, from 1993 to 1998. By comparison, U.S. exports to non-NAFTA countries grew by only 36.7 percent, or $109 billion, over the same period.

- The Region's exports to Mexico grew by 68.4 percent, or $9.4 billion; surprisingly, however, exports from the Dallas Region to Canada more than doubled (104.1 percent), increasing by $5 billion (see Chart 5). Accounting for most of the differences in export growth during this period were (1) Mexico's 1994 peso devaluation and subsequent recession, which cut living standards in half, and (2) Canada's higher per capita income, bolstering that nation's demand for U.S.-made goods. Even though the Region's exports to Canada grew more rapidly than its exports to Mexico, the Region's long-standing trade relationship, proximity, infrastructure, and the maquiladora program (explained on page 26) suggest strong growth potential to further expand trade with Mexico.

- The Region's export growth to Canada and Mexico was broad-based. Twenty-six of the 32 industries that export to Mexico experienced positive growth rates, all of which were at least double-digit gains. Similarly, 27 of the 31 industries that export to Canada registered positive growth rates, many of which were triple-digit gains.

Winners and Losers. In the Dallas Region, there were very few industry losers under NAFTA between 1993 and 1998. Most industries experienced increases in the volume of exports to NAFTA countries. Tables 3 and 4

CHART 5



[17] Garza, Adolfo, "With NAFTA Five Years Old, Only Strong Survive," *Houston Chronicle,* January 10, 1999.
[18] Kengor, "The Effect of NAFTA on Texas."
[19] U.S. export numbers cited in these bullet points *exclude* export numbers for Colorado, New Mexico, Oklahoma, and Texas and *include* export numbers for Puerto Rico and the Virgin Islands.

Table 3

Dallas Region Exports to Canada, by Industry Sector, 1993–98
($ thousands)

Ranked by Numerical Change	Industry Sector	Value of 1998 Exports	Numerical Change in Exports 1993–98	Percentage Change in Exports 1993–98
1	Electric & Electronic Equipment	$2,256,226	$1,628,609	259.5
2	Industrial Machinery & Computers	2,467,632	1,387,319	128.4
3	Chemical Products	1,384,434	468,648	51.2
4	Transportation Equipment	853,732	340,722	66.4
5	Fabricated Metal Products	515,198	261,422	103.0
6	Scientific & Measuring Instruments	471,382	222,879	89.7
7	Refined Petroleum Products	261,281	138,002	111.9
8	Primary Metals	281,752	112,054	66.0
9	Rubber & Plastic Products	218,923	110,718	102.3
10	**Other Commodities**	**333,524**	**107,071**	**47.3**

Sources: Census Bureau, Exporter Location Series; FDIC Division of Insurance, Dallas

show those industries that experienced the largest increases in exports to Canada and Mexico, respectively. The elimination or reduction of tariffs under NAFTA enabled U.S. industries to capitalize on their comparative advantage by exporting goods from high value-added, high-technology industries. Many of these industries are also capital-intensive and pay high wages.

Dallas Region exports to Canada and Mexico of electric and electronic equipment and industrial machinery and computers in 1998 totaled $4.7 billion and $8.2 billion, respectively. These two industries accounted for over one-third of the Region's exports to Mexico and almost half of its exports to Canada that same year. Among the Region's other leading exports to Canada were chemicals, transportation equipment, scientific instruments,

Table 4

Dallas Region Exports to Mexico, by Industry Sector, 1993–98
($ thousands)

Ranked by Numerical Change	Industry Sector	Value of 1998 Exports	Numerical Change in Exports 1993–98	Percentage Change in Exports 1993–98
1	Electric & Electronic Equipment	$4,981,743	$2,229,837	81.0
2	Industrial Machinery & Computers	3,288,944	1,380,923	72.4
3	Rubber & Plastic Products	1,470,561	1,008,442	218.2
4	Chemical Products	1,946,815	834,532	75.0
5	Primary Metals	1,408,591	828,785	142.9
6	Refined Petroleum Products	1,020,204	534,961	110.2
7	Fabricated Metal Products	844,068	414,976	96.7
8	Textile Mill Products	708,458	410,244	137.6
9	Apparel	944,021	384,078	68.6
10	**Furniture & Fixtures**	**470,375**	**310,660**	**194.5**

Sources: Census Bureau, Exporter Location Series; FDIC Division of Insurance, Dallas

and primary and fabricated metals. Industries that experienced a decline in exports to Canada include commodities (metallic ores and livestock products) and printing and publishing. These declines were relatively small at $25 million or less.

In addition to high-technology exports, other leading regional exports to Mexico included rubber and plastic products, chemicals and petroleum products, primary and fabricated metals, furniture and fixtures, and textiles and apparel. The strong growth in textiles and apparel, while not solely attributable to NAFTA, is particularly notable because these industries are often cited by NAFTA opponents as having suffered greatly from production plants exiting the country. However, proponents of NAFTA are quick to point out that relocation of apparel and textile plants outside the United States began years ago, and if production had not shifted to Mexico, it would have migrated elsewhere.

Actual vs. Trend. Charts 6 and 7 show predicted growth in U.S. exports to Canada and Mexico based on historical trends, compared with actual growth.[20] U.S. exports to Canada in 1998 were only slightly higher than those predicted by this trend ($156.6 billion vs. $152.9 billion). The United States and Canada had entered into a free trade agreement in 1989, five years before NAFTA; consequently, Canadian tariffs on American-made goods were already quite low by 1994, NAFTA's first year. Even so, U.S. exports to Canada grew by 20 percent or more in three of the first five years under NAFTA.

U.S. exports to Mexico, however, have grown much faster than predicted by their pre-NAFTA trend; by 1998, actual exports to Mexico were $78.8 billion, compared with the predicted value of $65.8 billion. Mexican tariffs on U.S. goods before NAFTA were much higher than U.S. tariffs on Mexican goods. Once NAFTA eliminated or reduced many of these tariffs, U.S. industries were able to compete with Mexican producers on a more level playing field. Moreover, Mexico's peso crisis in 1994 and subsequent recession in 1995 prevented U.S. exports to Mexico from growing as fast as they may have in the absence of these events.

Other Factors Contributing to Export Growth. Of course, not all of the nation's or the Region's growth in exports to Canada and Mexico can be attributed to NAFTA. Following are some other important factors:

- *Macroeconomic factors.* A nation's GDP or income growth, inflation and interest rates, and exchange rate are only a few of the economic factors that affect export growth. For example, in December 1994 the Mexican peso was devalued, losing 50 percent of its value by March 1995. Mexico subsequently plunged into its worst recession since the 1930s,[21]

Chart 6

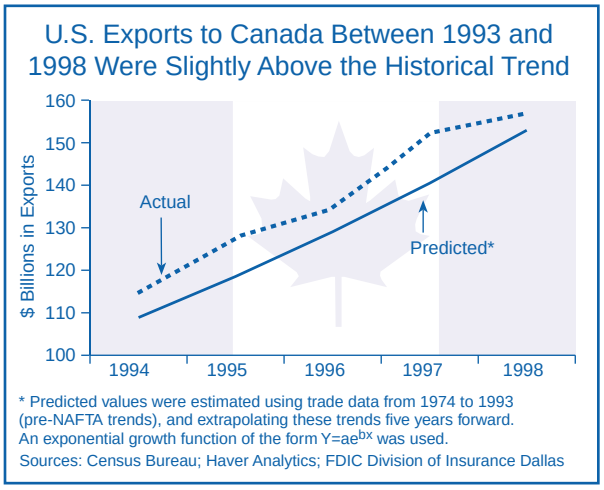
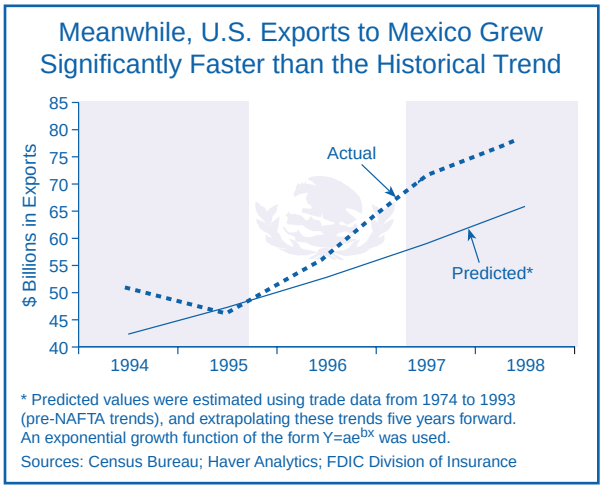


Chart 7



[20] Historical trends for U.S. exports to both Canada and Mexico were estimated using trade data from 1974 to 1993 to capture pre-NAFTA trends and then extrapolating these trends five years forward. An exponential growth function of the form $Y=ae^{bx}$ was used.

[21] Vargas, Lucinda, Federal Reserve Bank of Dallas, El Paso Branch, "Mexico's Economy in 1998 and 1999," *El Paso Business Frontier,* Issue 1, 1999.

with its real GDP declining 6.2 percent (1993 pesos) in 1995.[22] As a result, Dallas Region exports to Mexico fell 11.5 percent that year.

- *Previous trade agreements and economic reforms.* In some respects, the explosive growth in exports to Canada and Mexico predates NAFTA's implementation. As already mentioned, U.S. and Canadian officials signed a free trade agreement five years before NAFTA, and Mexico, under President De La Madrid, began the process of privatizing and deregulating its ossified economy since the mid-1980s. The strong growth in U.S. exports to Canada and Mexico, therefore, is partly attributable to events put in motion years before NAFTA.
- *Trends in high technology.* Strong U.S. investment in information technology is largely responsible for the strength of the current U.S. expansion and the rapid increase in high-technology exports. Overall, the U.S. economy is more productive, with many industries gaining a comparative advantage in high value-added exports, such as high-technology exports.
- *Mexico's maquiladora industry.* The maquiladora industry in Mexico, which predates NAFTA by three decades (1965), allows for the duty-free importation of machinery, equipment, components, and raw materials into Mexico; a duty is applied only on the value-added of the finished product exported back into the United States for domestic consumption. Many analysts believe that without the benefit of the maquiladora industry during NAFTA's early years, the consequences of Mexico's peso devaluation would have been protracted and more severe—thus further dragging down exports from the United States and the Region.

NAFTA: Where Do We Go from Here? For the most part, NAFTA's implementation has gone smoothly. Still, some major issues have yet to be resolved, including Mexico's failure to enforce intellectual property rights and the United States' refusal to open the U.S.-Mexico border to Mexican trucks under the agreed NAFTA timetable because of safety concerns. Flare-ups continue in politically sensitive areas, involving agriculture (e.g., food safety, antidumping violations, and elimination of export subsidies), environmental degradation, and labor rights. In addition, tensions between the United States and Mexico concerning the flow of illegal drugs and undocumented workers (although peripherally related to NAFTA) could affect progress on NAFTA's implementation.

Meanwhile, Mexico is aggressively pursuing unilateral and multilateral trade agreements with other nations to wean itself from its considerable dependence on the U.S. market—currently over 80 percent of Mexico's exports are destined for the United States.[23] For example, Mexico has trade agreements with Chile, Colombia, Venezuela, Bolivia, Costa Rica, and Nicaragua, and (recently) the EU. These agreements represent efforts by Mexico to diversify exports. It remains to be seen whether these agreements will disadvantage U.S. firms. For example, although these trade agreements are unlikely to result in decreasing U.S. exports to NAFTA countries, benefits from NAFTA could be diluted somewhat because of the diversion of trade and investment (particularly the latter) to and from other nations.

There is political pressure in the United States and Mexico to modify NAFTA. Living standards in Mexico are lower today than before NAFTA was implemented.[24] The 2000 presidential election in Mexico could affect the country's macroeconomic policies significantly. Since 1976, Mexico has undergone an economic crisis every time the country has changed administrations,[25] and it has experienced five currency devaluations in the past 23 years.[26] A recent survey sponsored by the ***Dallas Morning News*** revealed that almost 60 percent of Mexicans polled believe their nation will suffer another debilitating economic crisis with the 2000 election.[27] Nearly 75 percent of Mexicans think NAFTA benefited them little or not at all. Furthermore, the unproductive World Trade Organiza-

[22] "Mexico Consensus Economic Forecast" Historical Data, Bank One Economic Outlook Center, L. William Seidman Research Institute, College of Business, Arizona State University (Source INEGI and Banco de Mexico), *http://www.cob.asu.edu/seid/eoc/mexico/3-99/History.htm.*

[23] Jacobsen, Richard, "Mexico to Reduce U.S. Dependency with EU Pact," Reuters, November 24, 1999.

[24] McCosh, Dan, "Trade Still Rises Five Years into NAFTA," *El Financiero Weekly International* (Mexico City), January 3, 1999.

[25] Case, Brendan, "Strong Economy Predicted for Mexico," *Dallas Morning News,* November 13, 1999.

[26] Solis, Dianne, "U.S. Employers Grow More Reliant on Mexican Workers," *Dallas Morning News,* September 23, 1999.

[27] Case, Brendan, and Laurence Iliff, "Mexicans Fear Fiscal Crisis, Poll Finds," *Dallas Morning News,* December 6, 1999.

tion meeting in Seattle (November 1999) and the failure of the current U.S. administration to obtain fast-track authority to negotiate trade agreements could signal a change in momentum and erosion of U.S. public support for further trade agreements.

Summary

Following the implementation of NAFTA, Dallas Region exports to Canada and Mexico grew rapidly. Notwithstanding these large gains, it is extremely difficult to measure how much of this growth is attributable solely to NAFTA. Clearly, NAFTA has helped provide U.S. companies with access to Canadian and Mexican markets, expanding the flow of goods and capital among all three countries. Perhaps NAFTA's greatest achievement was to formalize the trade liberalization and economic reform policies begun in Mexico during the mid-1980s; these policies are expected to benefit the United States and the Dallas Region over the long term through increased trade opportunities. U.S. industries that benefited the most from NAFTA were generally high value-added, highly skilled industries; industries hurt most by NAFTA were typically labor-intensive, low-skilled industries.

The overall impact of NAFTA on jobs in the United States and Dallas Region, however, appears to be marginally positive. NAFTA continues to generate passionate discussions, both pro and con, regarding its effects on the U.S. economy. In the aggregate, however, NAFTA neither has been "a giant sucking sound" eliminating U.S. manufacturing jobs nor has it dramatically boosted U.S. employment.

Nevertheless, businesses and banks in the Region may be significantly affected by NAFTA, depending on business lines and geographic locations. Because of the Dallas Region's proximity to Mexico and the rapid growth of NAFTA-related exports, some institutions in the Region may realize benefits or identify opportunities, while others may face new risks.

Dallas Region Staff

Subscription Form

To obtain a subscription to the FDIC ***Regional Outlook***, please print or type the following information:

Institution Name _____

Contact Person _____

Telephone _____

Street Address _____

City, State, Zip Code _____

Please fax or mail this order form to:

FDIC Public Information Center
801 17th Street, N.W., Room 100
Washington, D.C. 20434
Fax Number (202) 416-2076

Please indicate below each Region's issue you wish to receive:

Atlanta _____	Dallas _____	New York _____	National _____
Boston _____	Kansas City _____	San Francisco _____	All _____
Chicago _____	Memphis _____		

Federal Deposit Insurance Corporation
Washington, DC 20429-9990

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

BULK RATE
MAIL
Postage &
Fees Paid
FDIC
Permit No. G-36